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## Democratic research: Setting up a research commons for a qualitative, comparative, longitudinal interview study during the COVID-19 pandemic

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## ABSTRACT

The sudden and dramatic advent of the COVID-19 pandemic led to urgent demands for timely, relevant, yet rigorous research. This paper discusses the origin, design, and execution of the SolPan research commons, a large-scale, international, comparative, qualitative research project that sought to respond to the need for knowledge among researchers and policymakers in times of crisis. The form of organization as a research commons is characterized by an underlying solidaristic attitude of its members and its intrinsic organizational features in which research data and knowledge in the study is shared and jointly owned. As such, the project is peer-governed, rooted in (idealist) social values of academia, and aims at providing tools and benefits for its members. In this paper, we discuss challenges and solutions for qualitative studies that seek to operate as research commons.

## 1. Introduction

Early in 2020, the COVID-19 crisis took most societies by surprise despite experts' warnings that the threat of a global pandemic was real (Riou & Althaus, 2020). A crisis is defined by 1) a threat to life, core values, and institutions, 2) uncertainty about the nature and extent of the threat as well as its consequences, and 3) urgency, as the threat must be dealt with immediately (Boin et al., 2016). The SARS-CoV-2 virus had triggered a crisis of unusual reach and severity, immediately affecting public health and the economy, putting severe strains on countries' capacity for political governance, and quickly percolating through all sectors of society. Policymakers were in no position to delay or procrastinate on measures.

The early phase of the COVID-19 crisis was characterized by an unprecedented demand for applicable knowledge about the biology of the virus, its medical impact, and epidemiology, but also the effectiveness and social impact of policy measures to contain the virus. Policymakers were forced to decide upon restrictive measures for pandemic containment under great uncertainty. Would the isolation of individuals and communities be the right response to halting or slowing down the spread of the virus? What would be the economic consequences of such measures? How would schooling be affected? Would the wearing of face masks be an effective measure? Would striving for herd immunity be a viable option? One of the effects of these uncertainties was an appeal to researchers all over the world and in all disciplines to produce and provide scientific knowledge about how to tackle these issues. Knowledge that was expected to be rigorous, timely, and relevant.

There is more than one tension, or perhaps contradiction, embedded in these three expectations of pandemic research. Rigorous knowledge is typically created through strict adherence to research protocols and guided by the accrued body of knowledge in a particular academic domain over a longer period and vetted through peer criticism and epistemic pluralism (Kitcher, 1993). Yet, timely knowledge puts a premium on speedy delivery. Relevant knowledge requires intensive communication with both policymakers and the public to ascertain that their needs and understandings shape research questions, the collection, and interpretation of data, as well as the acceptance of, and trust in, the results of research. Thus, science and policy in emergencies are forced to work under quite different conditions than they normally would (Birch, 2021). With the beginning of COVID-19, the demand for scientific knowledge suddenly put normally implicit issues of epistemology in stark perspective.

In this paper, we discuss the origins, design, and execution of a large-scale, international, comparative, qualitative research project that emerged out of this intense need for knowledge in light of the COVID-19 pandemic. The aim of the Solidarity in Times of a Pandemic (SolPan) study, which was set up within two weeks in March 2020, was twofold: 1) to explore what measures people take (or do not take) to respond to the COVID-19 pandemic, and 2) to inform policy for pandemic preparedness

in the future by understanding the meanings of and reasons for the adherence to measures. It involved qualitative interviews with residents of ten different European countries in April 2020, October 2020, and October 2021.<sup>1</sup> Moreover, in May 2020, interest from some Latin-American countries resulted in the formation of a sister consortium SolPan+, comprising 12 country teams.<sup>2</sup>

The aim of this article is not to present the answers to SolPan's research questions. These questions have been addressed in several papers by different writing teams (both country teams and consortium teams) that have either been published already or have been submitted to peer-review journals (Fiske, Galasso, et al. 2022; Fiske, Schönweitz, et al. 2022; Hangel et al., 2022; Johnson et al., 2022; Kieslich & Prainsack, 2021; Lucivero et al., 2022; Paul et al., 2022; Samuel et al., 2022; Schönweitz et al., 2022; Spahl, Pot, & Paul, 2022; Zimmermann, Fiske, McLennan, et al., 2021; Zimmermann, Fiske, Prainsack, et al., 2021; Zimmermann, Eichinger, Schönweitz, & Buyx, 2021). Instead, it sets out to present and discuss the design and organization of SolPan and SolPan+ as a research commons. As we will explain, the adoption of a research commons was a response to the affordances and constraints that academic institutions pose to researchers who organize large-scale rapid-response research (Richardson et al., 2021). This can assist other researchers intending to launch large-scale qualitative research studies and those research collaborations leaning on ideals of open science and data sharing. The paper can most fruitfully be read with a companion paper that discusses the grounding of the project's methodological design in pragmatist philosophy and how such a pragmatist approach to research addresses the needs of policymakers for timely, rigorous, and relevant research to assist in decision-making in immediate crises (Wagenaar et al., under review).

## 2. The commons approach as a response to the constraints of the academic system

SolPan and SolPan+ have been designed as a research commons. This form of organization was democratically decided among SolPan team members as a response to the specific configuration of contextual factors from which SolPan emerged. Amidst a rapidly evolving global pandemic with its inevitable uncertainties and an urgent need for reliable knowledge to aid decision-making, the institutional organization of the academic system has not been conducive to rapid-response, societally

<sup>1</sup> The first two rounds of interviews included nine countries: Austria, Belgium, France, Germany, Ireland, Italy, The Netherlands, Switzerland, United Kingdom. For the third round in October 2021, interviews were conducted in Austria, Germany, Italy, Switzerland, and Portugal (the latter joining as an additional country). The Italian team conducted additional interviews in June 2021.

<sup>2</sup> Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Ecuador, Guatemala, Mexico, Nicaragua, Paraguay, Venezuela

relevant research.

The contemporary university is characterized by compartmentalization (into academic disciplines and departments, discouraging interdisciplinary work), an output-oriented culture (with an obligation to publish in high-impact journals, obtain high citation scores, and an obsession with rankings), a hierarchical governance structure (with increasing power situated at the center of the university), an auditing culture (via periodic evaluations of individuals, research groups and departments, and Research and Teaching Excellence Frameworks), competition for external funding (which is a decisive factor in career advancement), and reliance on short-term, precarious labor contracts (Bartels et al., 2020; Levin & Greenwood, 2016). These developments need to be seen within a larger political and economic context. Many universities, particularly in the Anglo-Saxon world, have entered large loans with investment banks, mostly for real estate development to make their campus more attractive. This development is the result of the gradual ‘privatization’ of higher education; the gradual reduction of direct financing of universities through public funds. These loans need to be paid off with income generated through student enrollment, research grants, and by cutting employment and pension costs. Such a corporate culture that aims at income maximization actively discourages ‘patient’ research that acts on a broad spectrum of provisional evidence, including the experience of target audiences, fostering respectful, productive relations between stakeholders and decision-makers, and building capacity for reflection and learning (Bartels et al., 2020, p. 399).

That these are not mere theoretical considerations is demonstrated by two contradictory experiences regarding the SolPan project. When executives from a large international funding body had requested a design for a rapid response international comparative study on solidarity in times of a pandemic, its decision-making board rejected the proposal because it would rather fund a quantitative study. Thus, the original design of the SolPan project was met with disapprobation for qualitative research. Yet, the project was supported (with time made available for this research, and in one of the participating teams, also by a post created to support this project) by the collaborators’ institutions who were keen to play a role in addressing the pandemic. Consequently, the project could go ahead without dedicated funding in the initial stages of the project.<sup>3</sup>

As we will argue below, from the start, the core team saw the disruption of the pandemic as an opportunity for institutional innovation (Wagenaar & Prainsack, 2021). The unique constellation of circumstances made it possible to overcome some of the constraints and inadequacies of the contemporary corporate university. Specifically, the project should not just be about solidarity but take advantage of its voluntaristic nature to organize itself along solidaristic lines. SolPan was conceived as a research commons.

### 3. Principles of a research commons

The commons theorist and activist David Bollier defines a commons as a “social system for the long-term stewardship of resources that preserves shared values and community identity” (Bollier, 2014, p. 175). This definition contains most of what is essential about the commons as a governance arrangement. It also stays close to Elinor Ostrom’s important conceptualization of commons (Ostrom, 2015, p. 30), while avoiding her rational choice framework. Commons manage a resource – often natural resources, but also knowledge, work, housing, food, money, the internet, cultural goods, and urban space – but not just a resource. The resource is public; it is the shared value that people preserve so that it does not diminish or get exhausted. The value is for a community. It is public, not individual value, and it is up to the community to manage the valued resource – if it so chooses. In contemporary commons theory, commons

are defined by three intersecting spheres: everyday social life and the values and needs that govern it, a system of horizontal peer governance, and an organizational setup for producing and providing social goods and services (Bollier & Helfrich, 2019, p. 98). All this is held together by practices of commoning (Bollier, 2014, pp. 175–176; Bollier & Helfrich, 2019, p. 3). SolPan is, thus, organized according to the principles of peer governance, academic social values, and provisioning.

#### 3.1. Peer governance

First, SolPan is peer-governed. Peer-governance means that “[a]uthority, power and responsibility for implementation are diffused among identifiable people, each of whom has opportunities to deliberate and make decisions with others” (Bollier & Helfrich, 2019, p. 120). This feature means that not all teams are led by senior academics. Project sub-teams (analysis team, writing groups, country leads) comprise a mix of junior and senior scholars, and quite a few are led by early career researchers. This is an important strength of the project, and it is also a development opportunity for many involved, whether in relation to gaining research experience, leadership experience, or building new international links and networks. In addition, in an often highly hierarchical professional context such as contemporary academia, the democratic design and demographic make-up of the consortium offered an important non-hierarchical space for research and intellectual development.

The design of the SolPan and SolPan+ consortia and the development of the project offered unique training opportunities for researchers at all stages. Researchers came from a variety of backgrounds and different areas of expertise. In addition to the learning opportunity offered indirectly from the regular exchanges and discussions, at several stages of the project, both within and across country teams, those researchers most familiar with certain tools or methodologies offered informal training sessions to the others (e.g. about the use and the different functions of qualitative data analysis software, about data analysis methodologies, interview techniques, etc.). Disciplinary differences, for example regarding the epistemological and methodological understanding of what semi-structured interviewing entails and how open the interviews could or should be, became salient several times throughout the first years of the project. When they did, they were discussed within country teams and brought forward in the consortium meetings to be resolved. This is also an example of the lessons we drew after the initial round of interviews (in April 2020), agreeing that the following interviews would be much more probing and investigative to get to the heart of why people did certain things during a pandemic, or not.

#### 3.2. Rooted in the idealist social values of academia

These examples demonstrate the second characteristic of a research commons: it is rooted in the social values of academia. Ideally, academic communities operate on the principles of openness, trust, mutual respect, intellectual honesty, curiosity and freedom, the power of reasoned argument, and care and support for junior researchers (Collini, 2012, p. 7). Good ideas are followed wherever they may lead, they are meticulously attributed to their progenitor, and experienced researchers teach and support early career researchers.

This is, of course, a highly idealized description of the academic community in a language that is akin to the somewhat overwrought prose of Cardinal Newman’s referential tract on *The Idea of a University* (Newman, 2016). It represents an aspiration that has been rarely achieved; yet it serves as important guidance of what the public ideal of higher education could attain (Collini, 2012, p. 40). This ideal is certainly far removed from the current reality of being employed in the competitive, hierarchical, contemporary corporate university.

This gap between ideal and reality is precisely what we want to point out. The unique circumstances in which SolPan emerged made it possible to create an academic ‘free space’ (Boyte & Evans, 1986) in which

<sup>3</sup> Some country teams were successful in attracting funding for their teams after the first round of interviews, including Germany, Italy and Switzerland.

researchers, senior and early career, could experience something closer to the academic ideal. Free spaces are situated in the interstices of institutional, public, and private life. They fall outside the purview of authorities and are shaped by the values and practices of the people who are part of it. In the words of Evans and Boyte, free spaces are “defined by their roots in community, the dense, rich networks of daily life; by their autonomy; and by their public or quasi-public character as participatory environments which nurture values associated with citizenship and a vision of the common good.” (Boyte & Evans, 1986, p. 20) In SolPan, these are academic values and citizenship. To foreground community in an environment of competition, labor exploitation, and outcome orientation required that we used university resources to support our research commons (Wagenaar & Prainsack, 2021). We are aware that this is not a sustainable long-term strategy but we hoped – and still hope – that we demonstrated the possibility of the ideal of the university, the ‘prefigurative potential’ (Bartels et al., 2020, p. 399) of a more humane, effective, and rewarding way of engaging in inquiry. Nothing prevents universities or funders from financing research commons.

### 3.3. Provisioning

Finally, the third principle of a research commons is that it creates something: knowledge, social impact, capacity for learning, and productive relations with stakeholders and policymakers. In the language of contemporary commons theory, this is called *provisioning*. The term is meant as an antidote to the term ‘production’. In contrast to production in a market system, in provisioning people “co-make and co-use what they need, often with a division of labor but without the strict provision of roles organized through hierarchies. ... [The] output is made available to others and the benefits are retained and shared. Different skills, talents, and knowledge can all be orchestrated to contribute to production” (Bollier & Helfrich, 2019, pp. 164–165). In the SolPan research commons, provisioning was organized through the matrix organization of a plenary meeting and the different working groups, as well as through the shared ownership of the intermediary products of the project (funding and ethics applications, interview topic list, interview transcripts, coding schemes, and publications). Moreover, SolPan+ partners, who joined a bit later, received all available materials from SolPan, including interview training, research ethics materials, funding applications, and interview agendas. The Latin American teams modified them according to the specificities of their countries. These discussions, in turn, informed the content of the European interview agenda for phases 2 and 3 of the interviews.

Regarding data ownership, a joint decision was made that all the data collected as part of the wider study (SolPan or SolPan+, respectively) would be shared through a data commons agreement. Consequently, ownership of the data does not lie with individual country teams, but commonly with the entire consortium. Individual researchers can use all data – including that from other country teams – for their own publications if they make this known to the entire group, and as long as the ethics rules and regulations of participating universities are followed (especially regarding safeguarding the confidentiality and anonymity of study participants). Moreover, any publication or work arising from SolPan(+) needs to acknowledge that the research has been enabled by the SolPan(+) consortium. Where any publications of specific country teams draw strongly on transcripts from other countries, they are also encouraged to invite consortium members from these other countries as co-authors; if the latter accept this invitation, however, a substantial contribution to the conceptualization and writing of the paper is expected (the mere fact that they have carried out or facilitated data collection is not sufficient to merit co-authorship).

Next to the size and prestige of the research grants the researcher can obtain, publications are the focal point of the output-driven corporate culture of the contemporary university. Academic output is almost exclusively defined in terms of the largest numbers of articles in high-impact journals, conveniently measured by various rating mechanisms,

and serving as a shorthand for career progress. This culture has resulted in fierce competition among academics and in some cases fraud and plagiarism. In the SolPan research commons, the emphasis is instead on cooperation; jointly working on research problems we consider important and interesting. To foster this culture of cooperation we introduced a shared log of publication ideas. A shared document exists in which any member of the consortium can log an idea for a paper, and where consortium members can indicate their interest and willingness to collaborate on such a paper. Once an idea has been logged and interest has been voiced, the person logging the idea will initiate a first writing team meeting in which a manuscript will be conceived and planned, and tasks will be assigned. The shared publication log is provisioning in practice. The output is not only a journal article, but a relational achievement that nurtures and sustains an academic community governed by an ethos of science and that fosters academic identities that are defined in terms of cooperation and the pleasure of joint intellectual discovery.

## 4. Challenges and solutions

The commons approach, however, has not been without challenges, some of which follow from the nature of a commons (see Table 1 for an overview).

### 4.1. Freeriding

First, commons are vulnerable to free riding, exploitation, and ideological bias, the inability to think of academic work in terms other than individualistic competition. It might be tempting, for example, to use the experience and insights obtained in the consortium to publish a paper on a topical issue ‘to be there first’. As Ostrom explained in her famous design principles, all commons require requisite appropriation and provision rules that govern what members may take out of the consortium (Ostrom, 1990, p. 92). For SolPan, rules on authorship and data use were collaboratively established; they were drafted by a small group, then shared with all commons’ members in writing and to invite feedback, and subsequently discussed and agreed upon in an online meeting. These ground rules contributed to fostering mutual trust of all researchers investing time and effort in the research commons that they would get appropriate credit for their efforts. In this way, seniority did not pre-empt authorship, and many articles have been published with early career researchers as lead authors. Yet, as we will elaborate in the

**Table 1**  
Risks and challenges to a research commons.

Issue	Proposed solutions
<b>Freeriding</b>	<ul style="list-style-type: none"> <li>- Authorship rules</li> <li>- Rules for data use</li> <li>- Shared document in which ideas for publications are shared and consortium members can log their interest in participating in the publication</li> <li>- Awareness of needs and benefits to all researchers at all career stages, with a commitment to supporting goals</li> <li>- Joint decision-making (preferring discussion and consensus-building over presenting adversarial positions and voting)</li> </ul>
<b>Invisible work</b>	<ul style="list-style-type: none"> <li>- Publication of blogs on the SolPan website</li> <li>- Recommending early career researchers for speaking engagements and leadership roles</li> <li>- Fostering international networking and mentorship</li> </ul>
<b>Coordination</b>	<ul style="list-style-type: none"> <li>- Regular communication (weekly, bi-weekly, or monthly online meetings, depending on project stage)</li> <li>- Secure file sharing accessible to all consortium members</li> <li>- Delegation and structure (study leads, teams for different aspects of the study, country leads, etc.)</li> <li>- Funding application and ethics approval material are shared between teams (and mutually acknowledged)</li> </ul>
<b>Staff dropout/burnout</b>	<ul style="list-style-type: none"> <li>- Facilitate and emphasize open and honest communication during consortium meetings. When one member has an issue, it is a collective responsibility to solve it</li> <li>- Sharing resources and support when needed</li> </ul>

discussion, a willingness for solidaristic support was inevitable for the success of the research commons.

#### 4.2. Invisible work

Another challenge has been to ensure that those who did a lot of “invisible” work – such as preparing the interview guide, methods development, supporting the administration, and organizing the project, as well as those who did a lot of interviews – are not disadvantaged in the publication process. This challenge was addressed by sharing and exploring different opportunities to make the work of both individuals and the consortium visible. Examples of such opportunities include the publication of blogs on the SolPan website, senior members of the consortium recommending early career researchers for speaking engagements, and ensuring that they have the opportunity to lead on papers or subgroups (e.g., the interview guide group) of the consortium. Moreover, the SolPan(+) network provides members with a unique opportunity to get to know peers in other countries and from other disciplines, through which further collaborations or mentorship arrangements have emerged.

#### 4.3. Coordination

The SolPan project initially evolved in an open-ended way by solving immediate organizational issues (see Wagenaar et al., under review). In March 2020, the project grew from three to nine countries. Interviews started in early April 2020. The only way to manage this was to have frequent online meetings. What initially appeared as an organizational obstacle proved to be a blessing. It arguably fostered a more democratic communication context than other meeting formats may have done, as titles and other signals of academic seniority remained invisible. In addition, the organizational dynamics of meeting on a digital platform, which emphasizes short, pointed interactions and a focus on coming to a conclusion, injected an important dose of speed and efficiency into the project organization. For instance, to prepare for the first round of interviews, the team decided to create a subgroup that was responsible for formulating an interview topic guide (Charmaz, 2014). The draft guide was subsequently amended in the plenary. One team member, an experienced interviewer, provided a short training session on qualitative interviewing for less experienced members. In this actionable way, the team created a template for the organization of the larger project. Similar procedures were applied for the second and third round interview guides when also early career researchers contributed and took the lead. In the companion article (Wagenaar et al., under review) we describe how the variety of disciplines and experience in the team fulfilled a key condition for pragmatist, evolutionary learning (Ansell, 2011; Healey, 2009).

The setup and maintenance of the SolPan research commons would not have been possible without relatively solid research infrastructures at some of the involved universities and institutes. While some teams were able to attract country-specific funding for the second and third rounds of interviews, five country teams were unable to participate in the third phase of the interviews due to resource constraints. While this is part of many research projects, it makes it challenging for a research commons to plan for the longer term. It highlights the importance of the availability of reliable research infrastructures to provide a safety net for challenging times, and it puts a large question mark over the ubiquitous use of short-term contracts for early career researchers. In this sense, the set-up of SolPan showed noteworthy parallels with what research participants talked about in their reflections about the pandemic; many noted that the pandemic had exposed weaknesses in the safety net provided by states, with some calling for more institutional solidarity, for example in the form of a universal basic income. Similarly, we experienced first-hand the importance and advantages of basic structures of research support, such as the availability of funds for covering transcription costs, when setting up a large project to respond to current events.

#### 4.4. Staff dropout and burnout

The study presented an opportunity for those involved at many levels (e.g. conducting timely research, advancing qualitative research methods and managerial skills, being part of a large European and Latin American network, and overcoming the lack of control that caught many people at the start of the pandemic), but participating has also been demanding on energy and time. Because SolPan came unexpectedly – as did the pandemic – it did, in most cases, not substitute other workstreams, but instead was added to them. In that regard, the permeability of a research commons proved beneficial, as new team members could be onboarded flexibly. Moreover, some country teams managed to receive funding for additional staff, and these additional capacities served the whole consortium as they provided material and workforce shared with the whole research commons.

### 5. Conclusion: research as an act of solidarity

In this article, we presented the SolPan(+) project, an international research commons set up when many European countries entered lockdown in March 2020. The research commons was set up to seize the unique opportunity to study emerging societal responses to the pandemic in a timely and rigorous manner. The commons approach contributed to overcoming the hindrance of the corporate academic system and the lack of dedicated funding, particularly at the beginning of the project. Instead of having a list of predetermined deliverables, its outputs emerged as the project itself, in a pragmatist manner, continued to unfold and take shape (Wagenaar et al., under review). This allowed for relevant and timely, yet rigorous qualitative research in times of a pandemic.

Where the project investigates solidarity as an important societal pandemic issue, in many small ways its members thus also attempt to practice solidarity in their research conduct. The very idea of a research commons relies heavily on a mutual understanding of solidaristic research practices to achieve high-quality research outputs. The notion of solidarity addresses some of the challenges of working as a commons and was a guiding principle for the SolPan research commons agreement. For example, by sharing data and templates of funding applications and other resources amongst country teams; by supporting early-career researchers taking on new responsibilities; and by putting effort into an unfunded research project whose fate and future were uncertain.<sup>4</sup> Such commitment to a joint international research venture is hard to imagine without a strong sensitivity towards solidaristic practices, in which colleagues are willing to accept additional costs (Prainsack & Buyx, 2017). In the case of SolPan, these costs included, for example, dedicating time resources without extra financial resources or temporarily putting other projects on hold. The presence of a commons' sensitivity is not a given. Because a research commons functions within a competitive, corporate academic environment, time tends to work against it. The tension between the communal spirit of working within and for the larger whole and a more individualistic ethos of personal academic career development, increased over time, with some members starting to skip joint meetings and/or ignore agreed-upon appropriation and provisioning rules. The lack of monitoring and graduated sanctions procedures made the research commons vulnerable to such infringements. In addition, the pressures from the competitive environment of the corporate university and, in some cases, turnover among early career scholars, compelled some participants to drop out of the consortium.

In SolPan, academic research and democracy meet. Similar to democracy, it is inherent to the institution of the university that it falls short of its own high standards (Griggs et al., 2014; Norval, 2007). Commenting on the “intrinsic fallibility of democracy,” Griggs et al. argue that the individual citizen, or in our case, academics, find themselves in a

<sup>4</sup> We are aware that there are motivations other than solidarity that play a role in researchers' willingness to contribute to SolPan.

complex ethical position. “If we do not embrace a radical rejection of democracy because of its imperfections ... we have no alternative left but to take responsibility and try to repair the imperfections or undo the shortcomings. Democracy constantly has to be rediscovered” (Griggs et al., 2014, p. 27). Beginning as a practical response to a need for timely, relevant, and reliable knowledge about people's reactions to the unfolding COVID-19 pandemic, SolPan developed into a democratic alternative to the individualistic, competitive, output-oriented university. Clearly, the attempt at creating a research commons was fragile and not long-lived but it showed that the compromised ideal of a university could at least in principle be recreated, practically and effectively. This, to paraphrase Norval, keeps academic hope alive in the face of disappointment with it (Norval, 2007, p. 177). It also points toward practical ways of ‘repairing’ the academic ideal and animating them in the face of financial and market pressures. One such way is to set aside resources to facilitate and support academic commons that aspire to work on the interface of the university and society. SolPan(+) illustrates that it requires relatively limited resources to create a significant output in terms of impact and academic articles. As such, research commons are an important road to aligning our universities with the needs of society and the democratic needs of its academic employees - even in times of crisis.

### Ethical statement

As the corresponding author of this manuscript, I confirm on behalf of all co-authors that we have followed all ethical guidelines and best practice as set out by our host institutions, both when carrying out our research as well as during the drafting stages of this manuscript. Ethical approval was obtained from the Research Ethics Committees where the respective host institutions required this.

### CRedit authorship contribution statement

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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### References

- Ansell, C. (2011). *Pragmatist democracy: Evolutionary learning as public philosophy*. Oxford University Press.
- Bartels, K. P. R., Greenwood, D. J., & Wittmayer, J. M. (2020). How action research can make deliberative policy analysis more transformative. *Policy Studies*, 41(4), 392–410.
- Birch, J. (2021). Science and policy in extremis: The UK's initial response to COVID-19. *European Journal for Philosophy of Science*, 11(3), 1–27.
- Boin, A., Stern, E., & Sundelius, B. (2016). *The politics of crisis management: Public leadership under pressure*. Cambridge University Press.

- Bollier, D. (2014). *Think like a commoner: A short introduction to the life of the commons*. New Society Publishers.
- Bollier, D., & Helfrich, S. (2019). *Free, fair, and alive: The insurgent power of the commons*. New Society Publishers.
- Boyte, H., & Evans, S. (1986). *Free spaces: The sources of democratic change in America*. The University of Chicago Press.
- Charmaz, K. (2014). *Constructing grounded theory*. SAGE.
- Collini, S. (2012). *What are universities for?* Penguin Books.
- Fiske, A., Galasso, I., Eichinger, J., McLennan, S., Radhuber, I., Zimmermann, B. M., & Prainsack, B. (2022a). The second pandemic: Examining structural inequality through reverberations of COVID-19 in Europe. *Social Science and Medicine*, 292.
- Fiske, A., Schönweitz, F., Eichinger, J., Zimmermann, B. M., Hangel, N., Sierawska, A., ... Buyx, A. (2022b). The COVID-19 Vaccine: Trust, doubt, and hope for a future beyond the pandemic in Germany. *PLoS One*, 17(4), Article e0266659. <https://doi.org/10.1371/journal.pone.0266659>
- Griggs, S., Norval, A. J., & Wagenaar, H. (2014). Introduction: Democracy, conflict and participation in decentred governance. In M. E. Warren, S. Griggs, A. Norval, & H. Wagenaar (Eds.), *Practices of Freedom: Democracy, conflict and participation in decentred governance* (pp. 1–38). Cambridge University Press.
- Hangel, N., Schönweitz, F., McLennan, S., Fiske, A., Zimmermann, B. M., & Buyx, A. (2022). Solidaristic behavior and its limits: A qualitative study about German and Swiss residents' behaviors towards public health measures during COVID-19 lockdown in April 2020. *SSM - Qualitative Research in Health*, 2.
- Healey, P. (2009). The pragmatic tradition in planning thought. *Journal of Planning Education and Research*, 28(3), 277–292.
- Johnson, S. B., Lucivero, F., Zimmermann, B. M., Stendahl, E., Samuel, G., Phillips, A., & Hangel, N. (2022). Ethical reasoning during a pandemic: Results of a five country European study. *AJOB Empirical Bioethics*, 13(2), 67–78. <https://doi.org/10.1080/23294515.2022.2040645>
- Kieslich, K., & Prainsack, B. (2021). Solidarität in Zeiten einer Pandemie: Alltagspraktiken und Priorisierungentscheidungen im Lichte des Solidaritätskonzeptes. In A. Reis, M. Schmidhuber, & A. Frewer (Eds.), *Pandemien und Ethik: Entwicklung - Probleme - Lösungen* (pp. 29–43). Springer. [https://doi.org/10.1007/978-3-662-63530-8\\_3](https://doi.org/10.1007/978-3-662-63530-8_3).
- Kitcher, P. (1993). *The advancement of science: Science without legend, objectivity without illusions*. Oxford University Press.
- Levin, M., & Greenwood, D. J. (2016). *Creating a new public university and reviving democracy: Action research in higher education*. New York: Berghahn.
- Lucivero, F., Marelli, L., Hangel, N., Zimmermann, B. M., Prainsack, B., Galasso, I., & van Hoyweghen, I. (2022). Normative positions towards COVID-19 contact-tracing apps: findings from a large-scale qualitative study in nine European countries. *Critical Public Health*, 32(1), 5–18. <https://doi.org/10.1080/09581596.2021.1925634>
- Newman, J. H. (2016). *The idea of a university (New, revised and annotated edition)*. Scotts Valley, CA: CreateSpace Independent Publishing Platform.
- Norval, A. J. (2007). *Aversive democracy: Inheritance and originality in the democratic tradition*. Cambridge University Press.
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.
- Ostrom, E. (2015). *Governing the commons: The evolution of institutions for collective action (canto classics edition). The political economy of institutions and decisions*. Cambridge University Press.
- Paul, K., Zimmermann, B. M., Corsico, P., Fiske, A., Geiger, S., Johnson, S., & van Hoyweghen, I. (2022). Anticipating hopes, fears and expectations towards COVID-19 vaccines: A qualitative interview study in seven European countries. *SSM - Qualitative Research in Health*, 2, 100035. <https://doi.org/10.1016/j.ssmqr.2021.100035>
- Prainsack, B., & Buyx, A. (2017). *Solidarity in Biomedicine and Beyond*. Cambridge University Press.
- Richardson, J., Godfrey, B., & Walklate, S. (2021). Rapid, remote and responsive research during COVID-19. *Methodological Innovations*, 14(1), Article 205979912110085. <https://doi.org/10.1177/20597991211008581>
- Riou, J., & Althaus, C. L. (2020). Pattern of early human-to-human transmission of Wuhan 2019 novel coronavirus (2019-nCoV). *Euro Surveillance : Bulletin Européen Sur Les Maladies Transmissibles = European Communicable Disease Bulletin*, 25(4). <https://doi.org/10.2807/1560-7917.ES.2020.25.4.2000058>. December 2019 to January 2020.
- Samuel, G., Roberts, S. L., Fiske, A., Lucivero, F., McLennan, S., Phillips, A., & Johnson, S. B. (2022). Covid-19 contact tracing apps: UK public perceptions. *Critical Public Health*, 32(1), 31–43. <https://doi.org/10.1080/09581596.2021.1909707>
- Schönweitz, F. B., Eichinger, J., Kuiper, J. M. L., Ongolly, F., Spahl, W., Prainsack, B., & Zimmermann, B. M. (2022). The social meanings of artefacts: Face masks in the COVID-19 pandemic. *Frontiers in Public Health*, 10, 829904. <https://doi.org/10.3389/fpubh.2022.829904>
- Spahl, W., Pot, M., & Paul, K. T. (2022). Understanding compliance as multi-faceted: values and practices during the COVID-19 pandemic in Austria. *Critical Public Health*. <https://doi.org/10.1080/09581596.2022.2039379>
- Wagenaar, H., & Prainsack, B. (2021). SPROUTs of hope in times of crisis. *EASST Review*, 40(1).
- Wagenaar, H., & Prainsack, B. (2021). *The Pandemic Within. Policy Making for a Better World*. Bristol: Policy Press.
- Zimmermann, B. M., Eichinger, J., Schönweitz, F., & Buyx, A. (2021). Face mask uptake in the absence of mandates during the COVID-19 pandemic: a qualitative interview study with Swiss residents. *BMC Public Health*, 21. <https://doi.org/10.1186/s12889-021-12215-4>
- Zimmermann, B. M., Fiske, A., McLennan, S., Sierawska, A., Hangel, N., & Buyx, A. (2021a). Motivations and limits for COVID-19 policy compliance in Germany and Switzerland. *International Journal of Health Policy and Management*. <https://doi.org/10.34172/ijhpm.2021.30>
- Zimmermann, B. M., Fiske, A., Prainsack, B., Hangel, N., McLennan, S., & Buyx, A. (2021b). Early perceptions of COVID-19 contact tracing apps in German-Speaking countries: Comparative mixed methods study. *Journal of Medical Internet Research*, 23(2), Article e25525. <https://doi.org/10.2196/25525>